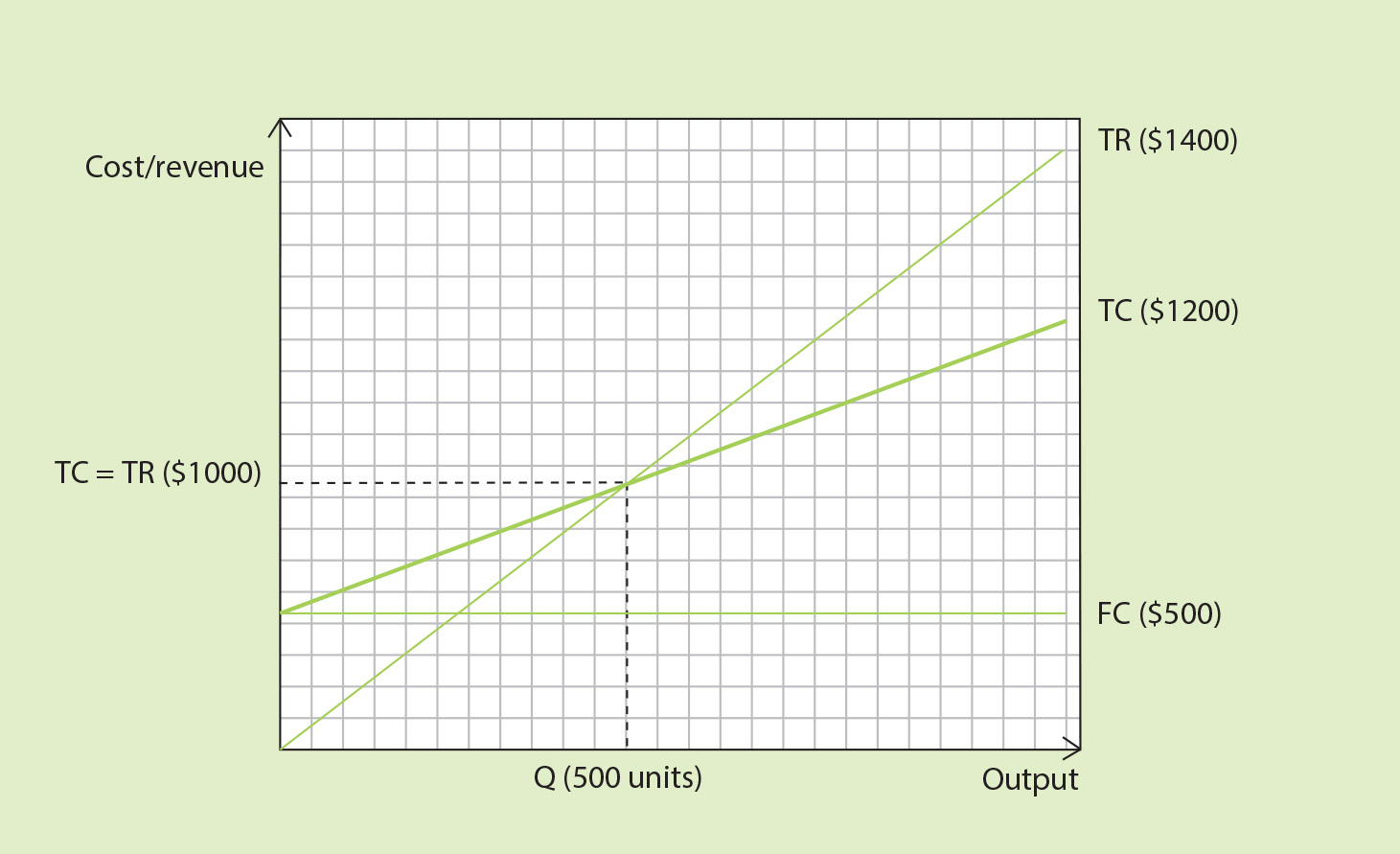
Section 3.3

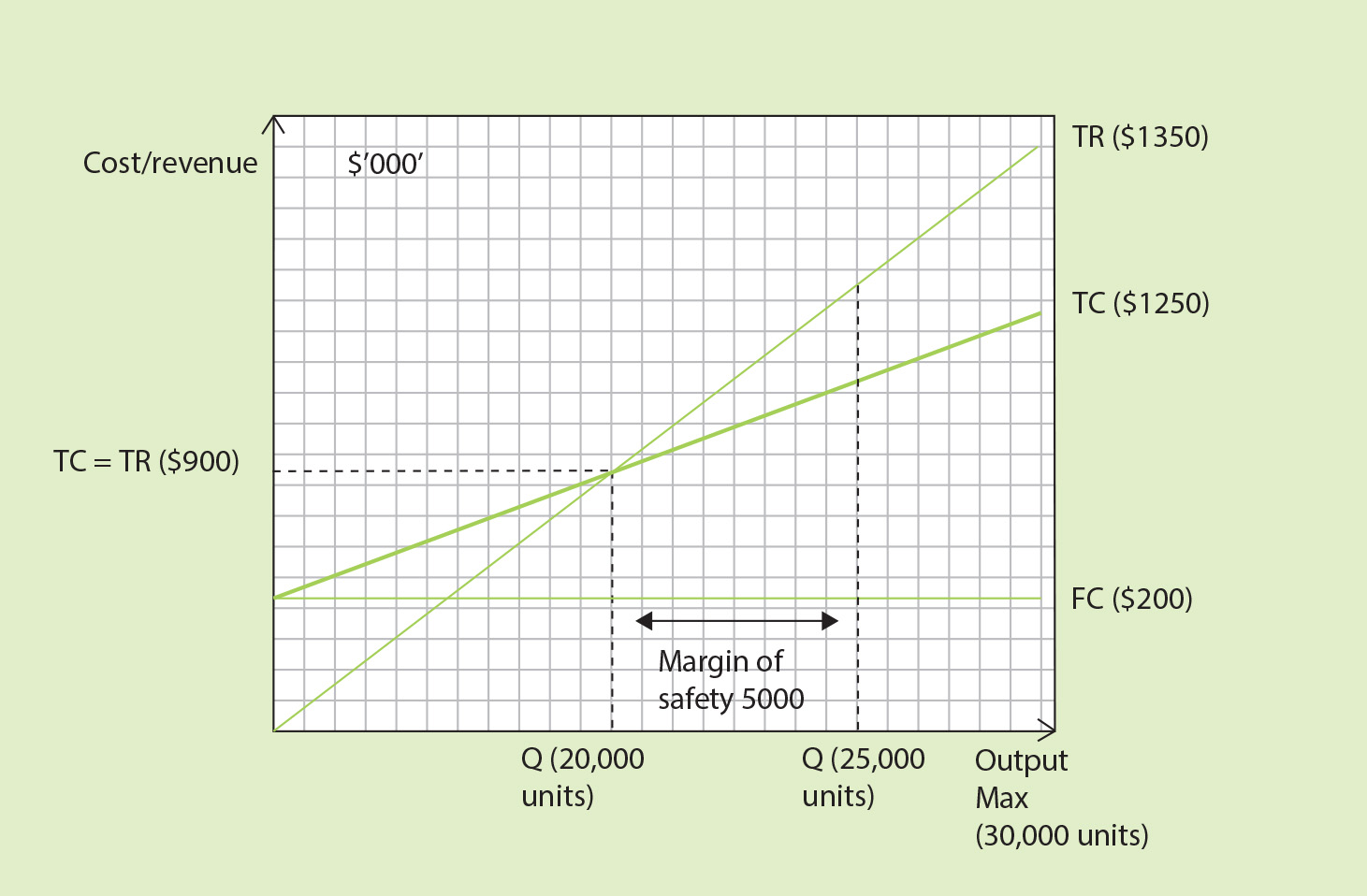
**Activity 3.3.1**

1. The ‘break-even point’ is the level of output at which total costs equals total revenue.
2. Hamburger stall break-even diagram:



**Activity 3.3.2**

1. ‘Unit contribution’ is the selling price of the product minus its unit variable cost.
2. La Pitch’s break-even diagram:



La Pitch profit:

|  |  |  |
| --- | --- | --- |
|  |  | $’000 |
| Sales | 25,000 x $45 | 1,125 |
| Direct costs | 25,000 x $35 | 875 |
| Contribution | 1,125 - 875 | 250 |
| Fixed cost |  | 200 |
| Profit |  | 50 |

1. The advantages to La Pitch reducing the price of its tents might be:

* Lower price leading to a rise in units sold and sales revenue if demand is price elastic
* Higher sales leading to economies of scale
* Rise in market share increases La Pitch’s name and power in the market.

The disadvantages might be:

* Fall in contribution means the firm has to sell more to cover fixed costs
* Lower price leads to a rise in units sold but sales revenue falls if demand is price inelastic
* Makes the product’s quality seem lower in the mind of the consumer.

**Activity 3.3.3**

1. ‘Direct costs’ are costs that can be clearly identified with each unit of production and can be allocated to a cost centre.
2. [$0.5m + $2.8m] / [$50,000 - $18,000] = 103 units.
3. Marab Sports might reduce its direct costs by:

* Cutting the pay to direct labour
* Making direct labour redundant
* Negotiating a cheaper direct material price with suppliers.

1. The advantages of Marab reducing costs to increase profits might be:

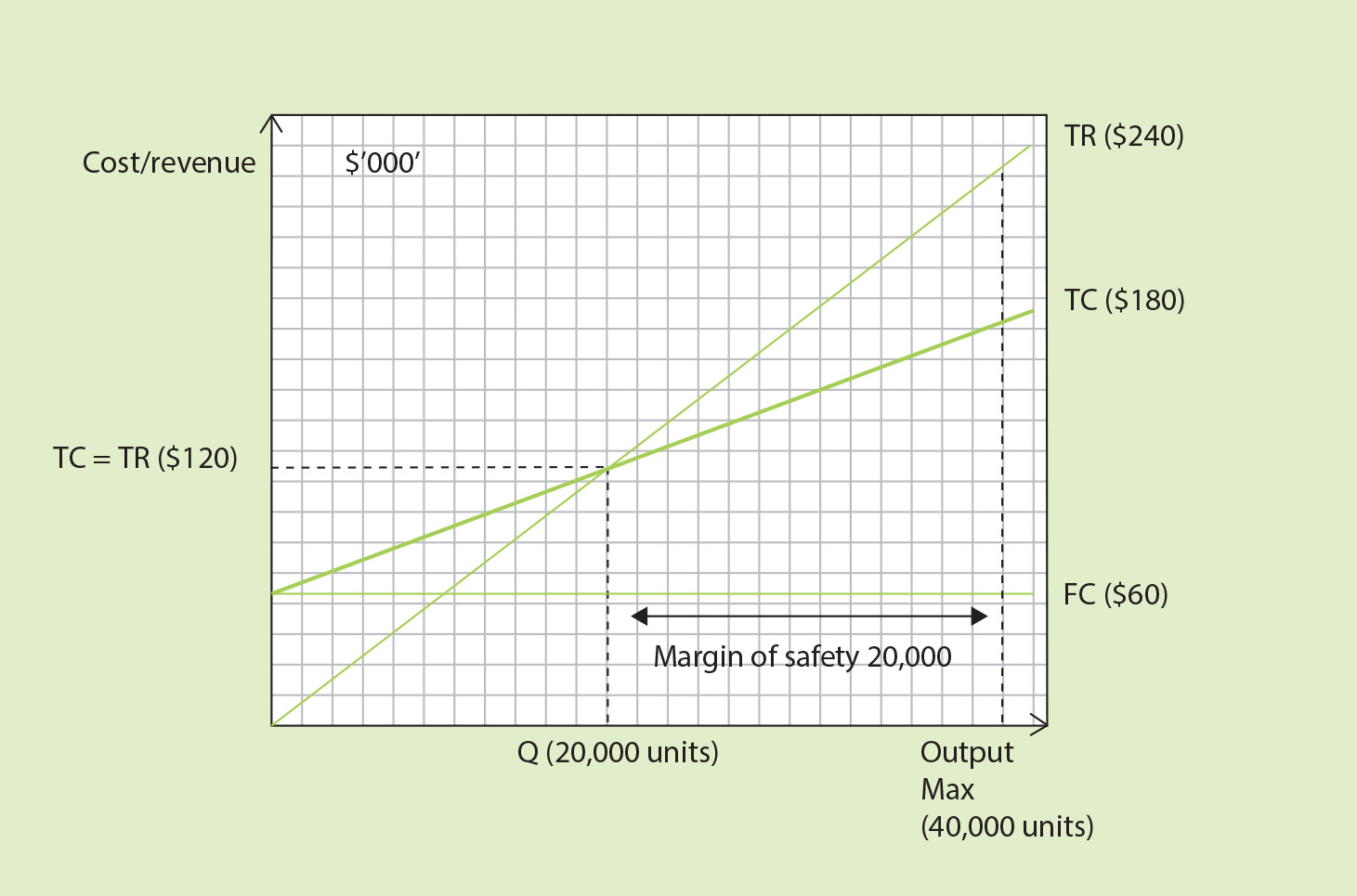
* It has more control over reducing costs than trying to increase sales
* Cost reduction can be made quickly
* Reduced costs can lead to reduced prices that increase sales.

The disadvantages might be:

* Lower direct costs demotivate staff
* Lower direct materials could be lower quality
* Cutting costs damages the reputation of the business.

**Activity 3.3.4**

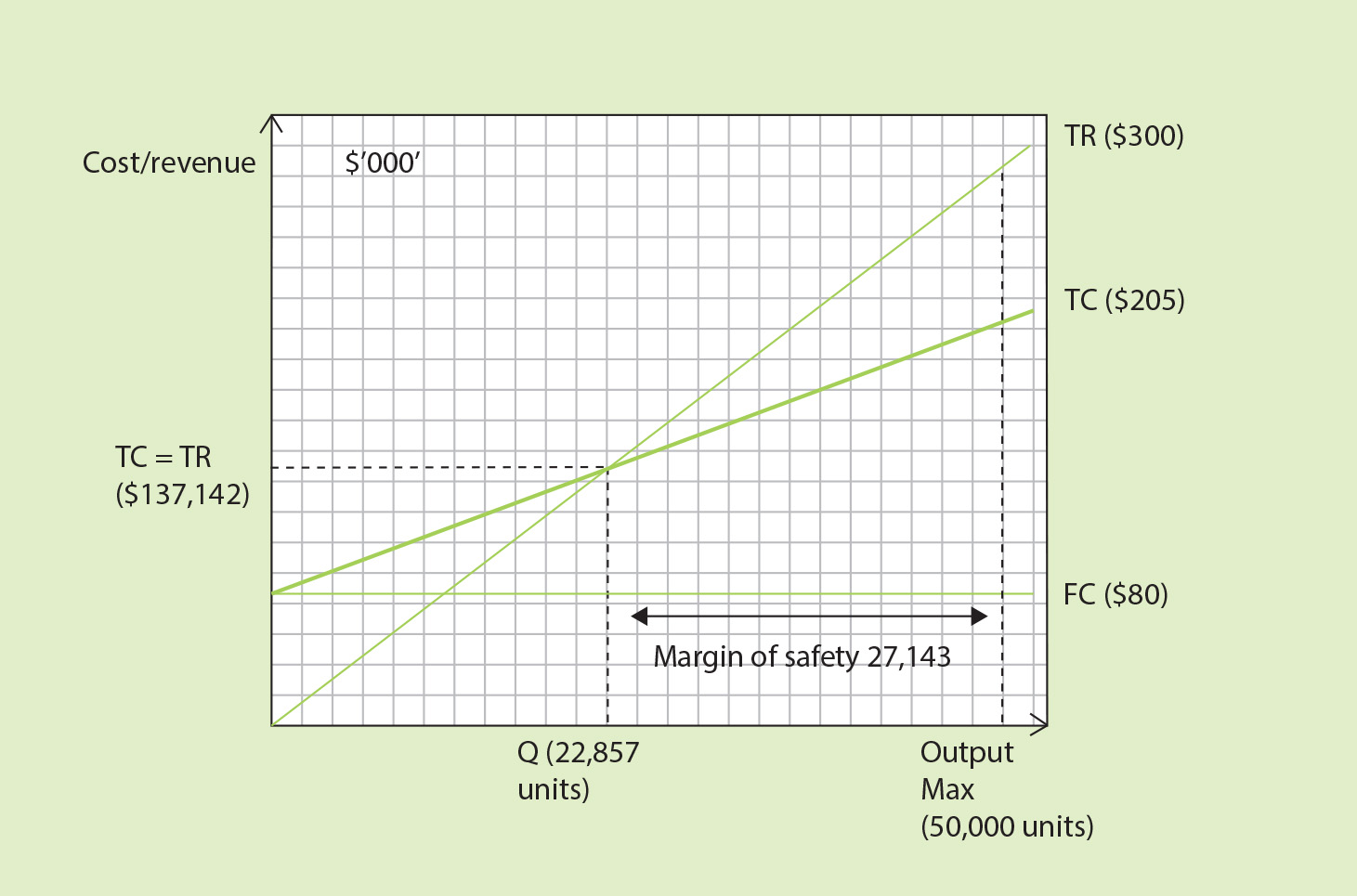
1. Site A break-even chart:



Saber Ltd profit:

|  |  |  |
| --- | --- | --- |
|  |  | $’000 |
| Sales | 40,000 x $6 | 240 |
| Direct costs | 40,000 x $3 | 120 |
| Contribution | 240 - 120 | 120 |
| Fixed cost |  | 60 |
| Profit |  | 60 |

Site B break-even chart:



Saber Ltd profit:

|  |  |  |
| --- | --- | --- |
|  |  | $’000 |
| Sales | 50,000 x $6 | 300 |
| Direct costs | 50,000 x $2.5 | 125 |
| Contribution | 300 - 125 | 175 |
| Fixed cost |  | 80 |
| Profit |  | 95 |

1. a. Break-even output:

Site A 20,000 units

Site B 22,875 units

b. Margin of safety:

Site A 20,000 units

Site B 27,143 units

c. Profit at maximum capacity:

Site A $60,000

Site B $95,000

1. Saber might choose:

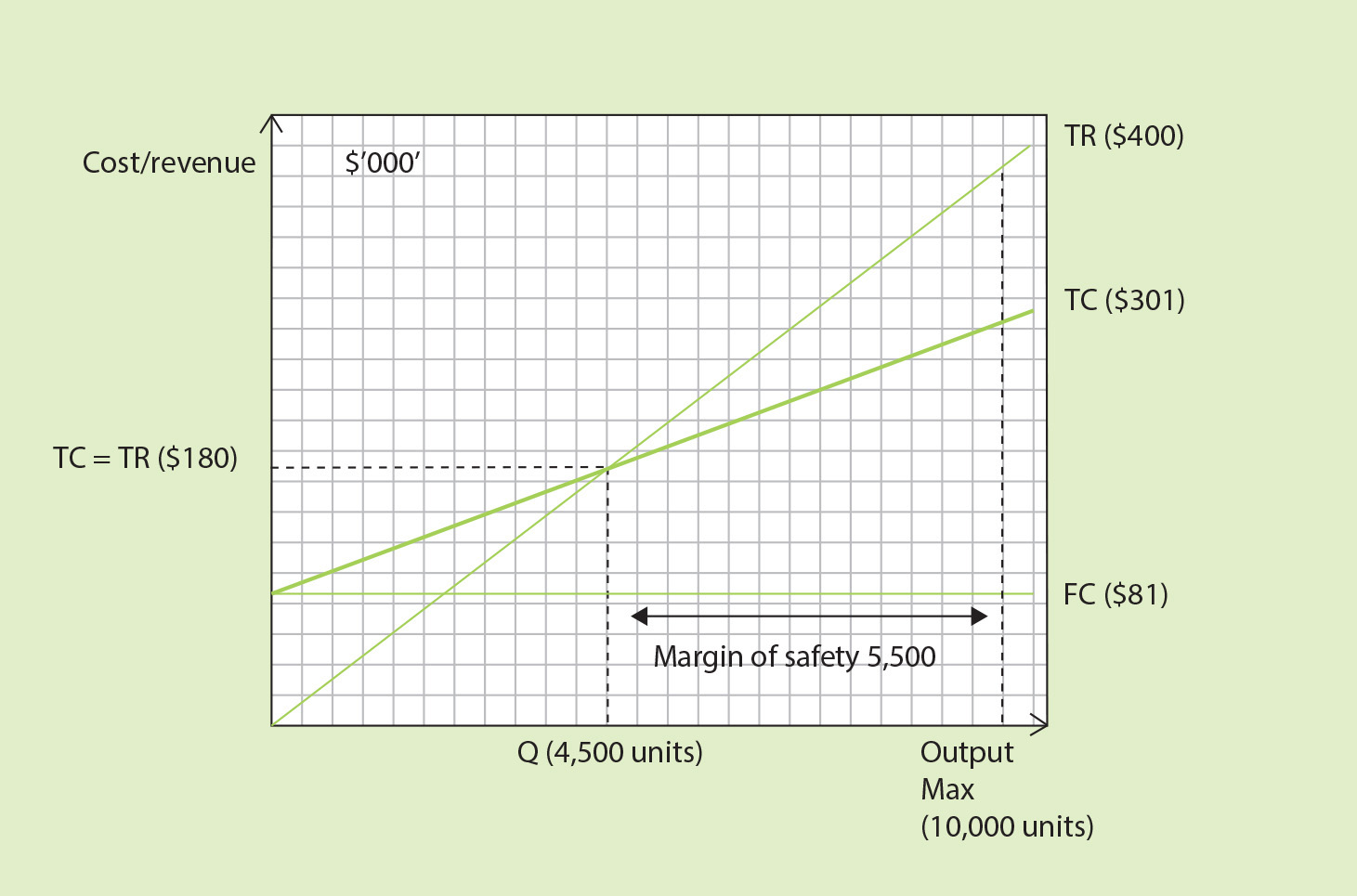
* Site A because it has the lower break-even point and less risk
* Site B because it has the higher profit.

1. Other factors Saber might take into account when deciding on location include:

* Transport links
* Skilled work force
* Location of its suppliers.

Exam practice question

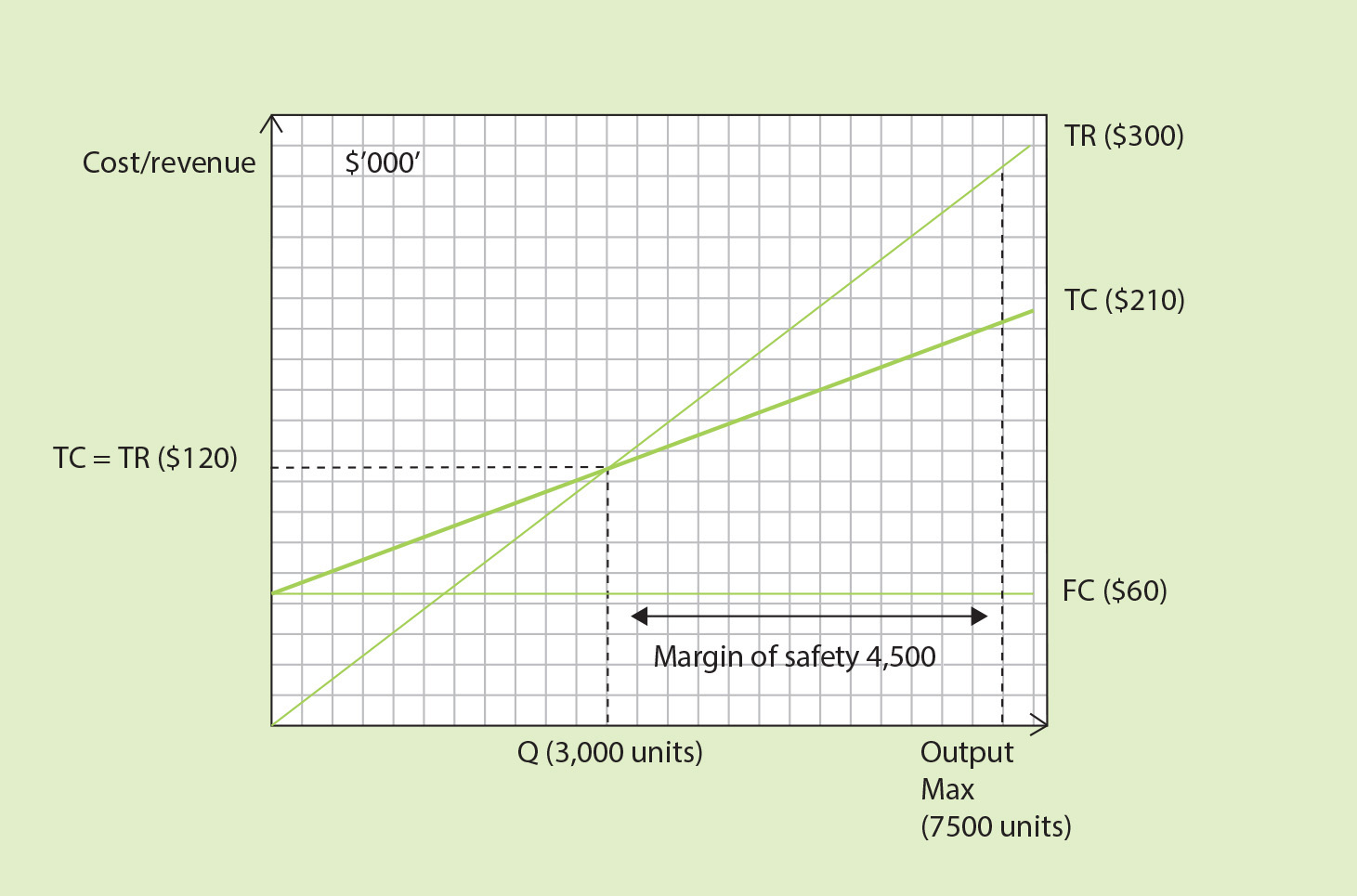
1. Break-even chart, Option 1:



Windcheater profit:

|  |  |  |
| --- | --- | --- |
|  |  | $’000 |
| Sales | 10,000 x $40 | 400 |
| Direct costs | 10,000 x $22 | 220 |
| Contribution | 400 - 220 | 180 |
| Fixed cost |  | 81 |
| Profit |  | 99 |

Break-even chart, Option 2:



Windcheater profit:

|  |  |  |
| --- | --- | --- |
|  |  | $’000’ |
| Sales | 7,500 x $40 | 300 |
| Direct costs | 7,500 x $20 | 150 |
| Contribution | 300 – 210 = 150 | 150 |
| Fixed cost |  | 60 |
| Profit |  | 90 |

1. Windcheater might choose:

* Option 1 because it has the higher profit
* Option 2 because it has the lower break-even point and less risk.

1. Break-even analysis might be useful to a business like Winchester because it has the following strengths:

* Gives a graphical view of a decision, which is good for presentations
* Shows how costs, revenues and profits are affected by business activity
* Gives an assessment of risk through break-even and margin of safety.

It has the following weaknesses:

* Struggles to deal with semi-variable costs
* Assumes linear variable costs and revenues
* No allowance is made for non-monetary factors.

**Key concept question**

Business models like break-even might be useful to support business strategy because they:

* Give a graphical view of a decision, which is good for presentations
* Show how costs, revenues and profits are affected by business activity
* Give an assessment of risk through break-even and margin of safety
* Are an important planning tool
* Give an assessment of the financial consequences of resources
* Can be used as a guide to resource needs.

They have the following weaknesses:

* They are based on forecasted information where there is always some inaccuracy
* They assume the business has the resources to meet the variables in the model
* They struggle to deal with semi-variable costs
* They assume linear variable costs and revenues
* No allowance is made for non-monetary factors.